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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/666,091

09/19/2003

Brenton A. Baugh

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08/26/2004

ALGILENT TECHNOLOGIES, INC.

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EXAMINER

CLARK, SHEILA V

ART UNIT

PAPER NUMBER

2815

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/666,091

Applicant(s)

BAUGH ET AL.

Examiner

S. V. Clark

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-14 and 16-19 is/are rejected.
- 7) ☒ Claim(s) 11, 15 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6, 7, 12, are rejected under 35 U.S.C. 102(b) as being anticipated by De Poorter.

De Poorter shows in figure 1 an optical device having a sub-mount 2, 14, 1 and Col. 4, lines 13-16 teach that conductors 15 are connected to laser diode 3 via mounting block 1, 2 and wire connections (not shown). Cap 11 is shown attached to said sub-mount 1, 2 and enclosed optical element 3 where and wherein said cap has a window (optical element) in the path of the optical signal of the optical device.

Laser 3 is shown to be a side emitter. Internal and external bonding pads are inherently associated with the via connections of conductor 15.

Use of active other active circuitry is taught in Col. 5, line 30.

The steps of electrically connecting, fabricating and bonding are deemed to be inherently taught by De Poorter.

Claims 1, 6, 7, 8, 9, 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Shin.

Shin shows in figure 4 at least one optical device 52 having a sub-mount 41 having via holes containing conductors 58. Cap 54 is shown attached to said sub-mount 41 and enclosed optical said element and wherein said cap has a

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window 56 (optical element) in the path of the optical signal of the optical device.

Reflector 57 is also taught formed on the top wall of the cap.

Internal and external bonding pads are inherently associated with the via connections of conductor 15.

Use of active other active circuitry 42 is taught.

The steps of electrically connecting, fabricating and bonding are deemed to be inherently taught by Shin.

Claims 1-10, 12-13, 16 are rejected under 35 U.S.C. 102(a) as being anticipated by Bhandarkar.

Bhandarkar shows in figure 3C an optical device having a sub-mount 302 having a laser diode 310 disposed. Cap 330 is shown attached to said sub-mount and enclosing said laser and having a reflector 336 in the path of the optical signal of the optical device.

Laser 3 is shown to be a side emitter. Internal and external bonding pads are shown in figures 9B, 9C relative to connections of boning wires 312 and conductor 914.

Use of active other active circuitry 320 is taught in Col. 5, line 30 and said cap is taught to be formed of silicon (i.e. see paragraph (0028), line 6.

The steps of electrically connecting, fabricating and bonding are deemed to be inherently taught by Bhandarkar see paragraph (0040).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to

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be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bhandarkar.

Paragraph (0035) of Bhandarkar teaches that a recess or depression is formed in a substrate or cap. Bhandarkar failure to limit creation of the recess or depressions by a particular means suggests that said depressions may be performed by conventional means well known to one of ordinary skill in this art. It would have been considered well known to a workman having ordinary skill in this art that the depressions may be formed by such conventional means as etching which is typically performed to create depressions, recesses, holes and grooves.

Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bhandarkar in view of The Admitted prior art in the disclosure on page 1.

Bhandarkar teaches the plurality of laser to a plurality of sub-mount area of a first wafer in figures 3D and 3E except for dividing to separate the packages.


The admitted prior art in the disclosure on page 1 of the instant disclosure teaches that in wafer processing it is well known to cut wafers into separate individual lasers. It would have been therefore obvious to one having ordinary skill in this art to divide the structure of Bhandarkar to separate into individual laser packages as is well known in wafer processing.

Claims 1-10, 12-14, 16-19 are rejected.

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Claims 20, 15, 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication should be directed to S. V. Clark at telephone number (571) 272-1725.



S. V. Clark
Primary Examiner
Art Unit 2815

August 20, 2004